

### FEATURE HIGHLIGHTS

- 8x 10/100T(x) M12 connector
- 4x 10/100/1000T(x) M12 connector
- Support Bypass function
- IP40/IP54(Optional) housing
- EN50155, EN45545-2 railway certificates
- Compliant with ITxPT, E Mark for public transport
- Operating in wide temperature



### DESCRIPTION

Sbjlink's RPT-M1012-4G, featuring 8 x Fast Ethernet ports and 4 x Gigabit uplink ports, are all designed with M12 connectors for vehicle application. With relay bypass function supporting in 4 Giga uplink ports, this switch can achieve non-stop communication while no power exists.

The power input of RPT-M1012-4G has redundant dual power inputs supporting 24-48VDC for most of the vehicles and high power input version, between 72V-110VDC. Operating temperature is extended between -40 degree C and 75 degree C. These are applicable on the vehicles and railway application.

To fit the on-board installation, the enclosure is slim and compact with IP40 and IP54 housing options. RPT-M1012-4G series all have EN50155 and EN45545-2 certificates for railway and E Mark for bus application. ITxPT is also design compliant to increase the interoperability with IT network for public transport.

This switch is an unmanaged switch but capable to modify into a web smart switch that enable IEEE 802.3x and provide flow control function.

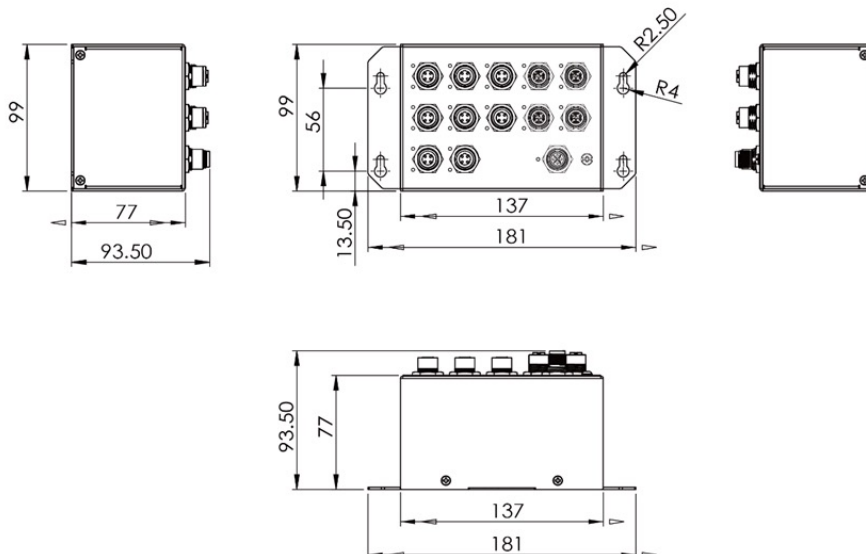
## SPECIFICATIONS

| Technology                |  |
|---------------------------|--|
| Standards                 | IEEE 802.3 10BaseT   |
|                           | IEEE 802.3u 100BaseTX  |
|                           | IEEE 802.3ab 1000BaseT   |
| Processing Type           | Store and Forward  |
| Switch Properties         |  |
| Switch Fabric             | 9.6Gbps  |
| Priority Queues           | -  |
| MAC Table Size            | 8K   |
| Packet Buffer             | 4Mbits   |
| Interface                 |  |
| Network Connector         | 8 x 10/100T(x) M12 Female D-coded 4-pole, 4x 10/100/1000T(x) M12 Female X-coded 8-pole, auto negotiation speed duplex mode, auto MDI/MDI-X |
| LED Indicators            | Per unit: PWR1, PWR2, Status   |
|                           | Ports: Link/Active   |
| Power Requirements        |  |
| Operation Voltage         | LV: 24-48VDC, HV: 72-110VDC, redundant dual inputs   |
| Connection                | M12 Male S-coded 4-pole  |
| Power Consumption         | 15W  |
| Protection                | Overload Current Protected, Reverse Polarity Protected   |
| Mechanical Construction   |  |
| Enclosure                 | SECC   |
| Protection Class          | IP40/IP54(Optional)  |
| Dimensions                | 181x99x94 mm (WxHxD)   |
| Weight                    | 1.20 kg  |
| Mounting                  | Wall Mounting Kits, Optional DIN-Rail Mounting   |
| Environmental Limits      |  |
| Operating Temperature     | Extended: -40°C ~ 75°C (-40°F ~ 167°F)   |
| Storage Temperature       | -40°C ~ 85°C (-40°F ~ 185°F)   |
| Ambient Relative Humidity | 5 to 95%, (Non-Condensing)   |

## SPECIFICATIONS

| Regulatory Approvals |                               |
|----------------------|-------------------------------|
| EMI                  | FCC Part 15 Subpart B Class A |
|                      | CE EN 55032 Class A           |
| EMS                  | IEC61000-4-2 (ESD)            |
|                      | IEC61000-4-3 (RS)             |
|                      | IEC61000-4-4 (EFT)            |
|                      | IEC61000-4-5 (Surge)          |
|                      | IEC61000-4-6 (CS)             |
|                      | IEC61000-4-8 (Magnetic Field) |
| Free Fall            | IEC60068-2-32                 |
| Shock                | IEC61373                      |
| Vibration            | IEC61373                      |
| Green                | RoHS Compliant                |
| Certifications       | EN 50155                      |
|                      | EN 45545-2                    |
| MTBF                 | >100,000 hours                |
| Warranty             | 5 Years                       |

## DIMENSIONS (Unit: mm)



| Ordering Information              |  |
|-----------------------------------|--|
| RPT-M1012-4G-LVDC-T-X2            | <p>12 Port Industrial Unmanaged Gigabit M12 Switch</p> <ul style="list-style-type: none"> <li>- 8 x 10/100T(x) + 4 x 10/100/1000T(x) M12 connector</li> <li>- Power Input: 24-48VDC</li> <li>- Operating Temperature: -40°C ~ 75°C (-40°F ~ 167°F)</li> <li>- Protection Class: IP40</li> <li>- UL Compliant</li> </ul>  |
| RPT-M1012-4G-LVDC-I54-T-X2 (IP54) | <p>12 Port Industrial Unmanaged Gigabit M12 Switch</p> <ul style="list-style-type: none"> <li>- 8 x 10/100T(x) + 4 x 10/100/1000T(x) M12 connector</li> <li>- Power Input: 24-48VDC</li> <li>- Operating Temperature: -40°C ~ 75°C (-40°F ~ 167°F)</li> <li>- Protection Class: IP54</li> <li>- UL Compliant</li> </ul>  |
| RPT-M1012-4G-HVDC-T-X2            | <p>12 Port Industrial Unmanaged Gigabit M12 Switch</p> <ul style="list-style-type: none"> <li>- 8 x 10/100T(x) + 4 x 10/100/1000T(x) M12 connector</li> <li>- Power Input: 72-110VDC</li> <li>- Operating Temperature: -40°C ~ 75°C (-40°F ~ 167°F)</li> <li>- Protection Class: IP40</li> <li>- UL Compliant</li> </ul> |
| RPT-M1012-4G-HVDC-I54-T-X2 (IP54) | <p>12 Port Industrial Unmanaged Gigabit M12 Switch</p> <ul style="list-style-type: none"> <li>- 8 x 10/100T(x) + 4 x 10/100/1000T(x) M12 connector</li> <li>- Power Input: 72-110VDC</li> <li>- Operating Temperature: -40°C ~ 75°C (-40°F ~ 167°F)</li> <li>- Protection Class: IP54</li> <li>- UL Compliant</li> </ul> |